| • A number of functional groups react with hydroxide ion. Complete the following table. NB: If there is no reaction, write "no reaction". |                                   |  | Marks<br>5 |
|---|-----------------------------------|--|------------|
| Starting Compound   | Reaction Conditions               | Organic Product(s)   |            |
| CH <sub>3</sub> OCH <sub>2</sub> CH <sub>3</sub>  | hot 4 M NaOH                      | O + HOCH <sub>2</sub> CH <sub>3</sub>  |            |
| СО <sub>2</sub> Н<br>СО <sub>2</sub> Н<br>ОН  | 1 M aqueous NaOH                  | CO <sub>2</sub><br>OH  | 1          |
|   | hot 4 M NaOH<br>prolonged heating | $\rightarrow \qquad \qquad$ |            |